



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

VOLUME XVI
NUMBER 6

JUNE, 1908

WHOLE
NUMBER 156

THE TECHNICAL HIGH SCHOOL OF CLEVELAND

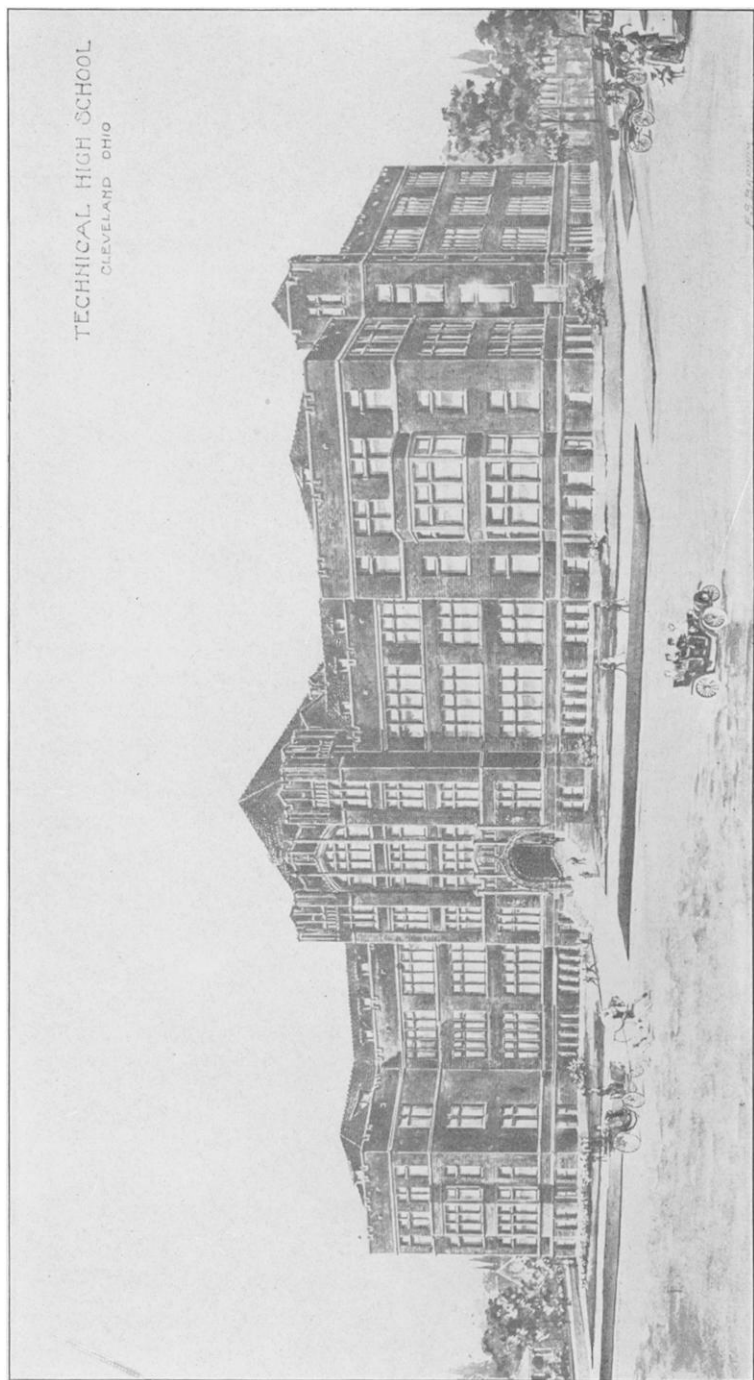
WILLIAM H. ELSON

Superintendent of Schools, Cleveland, Ohio

Cleveland is building a large technical high school. In some respects this school is not planned upon the lines of any other high school in the country. It is not a manual-training school nor is it a trade school, although it is allied to each. It is a special school devoted to a special purpose. Most high schools of like character give prominence to the usual high-school courses with manual training tacked on. This school emphasizes the technical work and the time of the student is about equally divided between the academic and the technical. It does not offer the usual college-entrance courses, however it prepares for technical colleges. The academic studies are selected with reference to the demands of the shop (and citizenship) and of their bearing upon the intelligent control on the student's part of the technical problems involved. The school has a four-year course and is open both to boys and girls who have completed the eighth grade of the elementary school.

The building is English-Gothic in design and is executed in dark reddish-brown shale brick with brown terra cotta trimming, resting upon a heavy cut stone water table. Four floors are available for shops, laboratories, classrooms, gymnasium, auditorium, library, administration offices, clubrooms for school organizations, restrooms for women teachers, a similar room for men teachers, and a commodious lunch-room.

TECHNICAL HIGH SCHOOL
CLEVELAND OHIO



In the department for boys, provision is made for mechanical and architectural drawing, wood turning and cabinet making, pattern making and foundry practice, blacksmithing and tool forging, and machine-shop practice.

In the department for girls the work may be classified under two heads: (1) art instruction—including the following: pictorial and decorative composition, perspective, still life, landscape, model and figure drawing (using pencil, brush, ink, and charcoal); applied design, cardboard construction, overglaze and underglaze pottery, leather work (stencil, colored, and repoussé), lettering and illuminating, wood-block printing, book-binding, and art-metal work; (2) household arts—including the following: hand and machine sewing; dress, garment, and costume making; fall, winter, and spring millinery; weaving, art needle-work; plain, fancy, and invalid cookery; table service, marketing, laundry practice; first aid to the injured; hygiene, sanitation, and personal physiology; house planning and decoration; home management and household accounts.

College-entrance requirements in no way enter into a determination of the outlines of this school's courses. However, the preparation needed for admission to the colleges has recently undergone revision and the industrial instruction afforded by this school has in consequence received recognition as college-entrance requirement for technical colleges. Of the sixteen required credits for college entrance, six may be given for work in the mechanic arts, the other ten in academic studies, or four may be allowed for household arts, the remaining twelve in academic work. In the technical school the atmosphere must be one of manufacture and industry and upon these themes the academic studies must bear with particular force.

In the past, high schools have not taught many subjects with a definite view to their ultimate utility but they have sought merely general culture. In a school which trains for a vocation less attention can be paid to general education; subject-matter of a more specific nature must occupy the time and efforts of the students. Arithmetic, also algebra, of a very definite character dealing largely with shop problems is essential; English, treat-

ing of industrial and labor problems, of manufacturing processes and distribution of the product, together with the study of the great industrial authors such as Carlyle, Ruskin, and William Morris, can well supplant in part the more purely literary authors. So also with German which offers a fine field of technical reading; history can be taught along lines of industrial development; science can be applied science of the most intensive sort; and so on throughout the entire list of studies comprising the course. This means a radical departure from the usual high-school practice and courses will not parallel those in academic high schools.

During the last two years of the course pupils will be allowed to specialize along lines to which they are particularly adapted in order that upon graduation they may be better fitted for their life-work. A vocation must be chosen by the great majority of young men and young women, since only a small proportion find it possible to enter a profession or to enter upon a business career. This is forced upon most young people early in life, and if proper choice can then be made it is a distinct advantage to them.

Since the principles underlying all the arts are identical, during the first two years of the course a more or less definitely prescribed outline of instruction must be laid down. If at the end of this time peculiar adaptability in any particular direction becomes evident to student, parent, or teacher, specialization along this line will be possible. To illustrate more clearly: take the case of a young man who finds that his tastes and talents run along lines of machinery construction; during his third and fourth years he may devote twenty hours a week to machine-shop practice; after completing the first two preliminary years in wood and iron working he may then devote a major part of his time to the particular branch along which his abilities lie and to which he may wish to devote his life-work.

The department for girls will have domestic science and domestic and industrial art for its basis, and around these studies the rest of their work will be grouped. Homemaking courses are of greatest value in the training of girls and it is the

aim of this department to fit young women for the intelligent direction of a household. The course in cooking will be very practical and comprehensive, covering preparation and analysis of foods, the study of food values, and the preparation and serving of complete meals. This will be supplemented by courses in home planning and house decoration, taking up the study and arrangement of rooms, wall, and floor coverings, study of furniture and pictures, draperies, etc. This will be organized with particular reference to economy and good taste. Segregated classes for the study of physiology and personal hygiene will give students an opportunity to acquire a knowledge of those things which are so essential to their future health and happiness. This instruction will be supplemented by a complete course in home nursing, including first aid to the injured, the care of invalids and particularly of children. Instruction in high schools has never been specific along these lines but has been of a purely general nature. These courses are to be very practical to the end that when a girl has forced upon her the care of the home and the family she will be thoroughly prepared for functions of this kind. The keeping of household accounts, economic home management, marketing, etc., will receive due consideration.

Art holds an important place in this school as it must in any school devoted to the fitting of young people for active work in the world. The products of industry must unite beauty with use and productive skill must be liberated by creative fervor. Courses will be offered in the fine arts and in constructive and applied design. The work in pottery will have an equipment of potter's wheels, lathes for turning models, a slip house and glaze room set, kilns, etc. There will be suitable equipment for work in leather, textiles, metal, bookbinding, printing, and illuminating.

The course in domestic art will be thoroughly practical and will include plain sewing by hand and machine, garment and costume making. Textiles will find treatment, and practical millinery. In all this work regard will be had for good taste, simplicity, and economy.

During the last two years of the course, girls will be offered opportunities for specialization similar to those provided for boys. In most cases the nature of the studies and the method of teaching demand a separation of boys from girls. There will, therefore, be organized within this building a boys' school and a girls' school.

By eliminating the long summer vacation, a saving of an entire year in the high-school course will be accomplished. This is most desirable from the standpoint of the student of limited means who wishes to secure a maximum of education in a minimum of time. It is therefore proposed to offer a three-year course as well as a four-year course. In any event the work covered will be identical. The school year will be divided into four twelve-week periods with an intermission of one week between quarters. Pupils who do not wish to take advantage of this shortened course or whose physical condition does not allow the close application of continuous study will still have the opportunity of devoting four years to their high-school course.

Following is the program of work:

Morning Session 8:30 A.M. to 11:45 A.M.

Afternoon Session 12:45 P.M. to 4:00 P.M.

40 forty five minute periods per week

SCHEDULE FOR BOYS

FIRST YEAR

ACADEMIC	15 PERIODS PER WEEK	TECHNICAL	14 PERIODS PER WEEK
English	5 periods	Freehand and	} 6 periods
Arithmetic and Algebra	5 periods	Mechanical Drawing	
Industrial Geography	5 periods	Turning and	} 8 periods
		Cabinet Making	
		Physical training	2 periods
		Study	9 periods

SECOND YEAR

ACADEMIC	15 PERIODS PER WEEK	TECHNICAL	14 PERIODS PER WEEK
English	5 periods	Mechanical Drawing	} 6 periods
Plane Geometry	5 periods	Pattern Making and	
Elementary Chemistry	5 periods	Foundry Practice	} 8 periods
		$\frac{1}{3}$ year.	
		Forging $\frac{2}{3}$ year	
		Physical training	2 periods
		Study	9 periods

THIRD YEAR

ACADEMIC	15 PERIODS	TECHNICAL	16 PERIODS
English	5 periods	Mechanical Drawing	6 periods
Industrial History or German	5 periods	Machine Shop $\frac{1}{2}$ year.	} 10 periods
Physics	5 periods	Elective—any shop $\frac{2}{3}$ year	
Study 9 periods			

FOURTH YEAR

ACADEMIC	10 PERIODS	TECHNICAL	16 PERIODS
Advanced Mathematics or Science	} 5 periods	Elective Drawing or Shop	} 16 periods
American History and Civics			

Elective (academic or technical) 5 periods

Study 9 periods

In the fourth year 21 periods a week may be devoted to any line of
technical training

SCHEDULE FOR GIRLS

FIRST YEAR

ACADEMIC	15 PERIODS PER WEEK	TECHNICAL	14 PERIODS PER WEEK
English	5 periods	Cooking	4 periods
Arithmetic and Algebra	5 periods	Machine Sewing	4 periods
Botany and Physiology	5 periods	Applied Art	6 periods
Physical training 2 periods			
Study 9 periods			

SECOND YEAR

ACADEMIC	15 PERIODS	TECHNICAL	14 PERIODS
English	5 periods	Cooking	4 periods
Constr. Geometry	5 periods	Dressmaking	4 periods
Chemistry (Applied)	5 periods	Applied Art	6 periods
Physical training 2 periods			
Study 9 periods			

THIRD YEAR

ACADEMIC	15 PERIODS	TECHNICAL	14 PERIODS
English	5 periods	Laundry $\frac{1}{2}$ year.	} 4 periods
Industrial and Art	} 5 periods	Hygiene and Invalid	
History (European)		Cookery $\frac{2}{3}$ year	
Physics or German	5 periods	Millinery	4 periods
		Applied Art	6 periods

Physical training 2 periods

Study 9 periods

FOURTH YEAR			
ACADEMIC	10 PERIODS	TECHNICAL	14 PERIODS
Industrial and Art	} 5 periods	Domestic Science	4 periods
History (American) and Civics		Dressmaking	4 periods
Advanced Science or German		Applied Art	6 periods
	5 periods		
	Elective (academic or technical) 5 periods		
	Physical training 2 periods		
	Study 9 periods		

All girls are required to take hygiene. The 14 periods assigned to technical training may be subdivided as follows:

Cooking or Dressmaking and Millinery.....	4 periods
Applied Art	10 periods

Also in the third year 14 periods a week and in the fourth year 19 periods may be devoted to any line of technical training.

One of the most important missions which this school will fill is the betterment of people already engaged in a given vocation. The abolishment of the apprenticeship system in the subdivision of manufacturing processes has practically made it impossible for mechanics to secure any general training which enables them to better their condition. There is a distinct need among semi-skilled working classes of an opportunity for industrial education and this school will offer trade courses during the evening to men and women already engaged in a given trade. The night classes will be divided into two sections, each reporting three nights a week from 7:00 until 9:30. One section will meet Monday, Wednesday, and Friday evenings—the other Tuesday, Thursday, and Saturday evenings. In this way the night trade school will accommodate thirteen hundred men and seven hundred women.

An evening course of two years will warrant the issuing of a certificate and by requiring a high standard of work such certificate should have significance and value. It places in the hands of graduates of the evening school a certificate of character, workmanship, and industrial intelligence.